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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/683,376	12/19/2001	Robert W. Droege	24-NS-6049	7708

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EXAMINER
KEITH, JACK W

ART UNIT	PAPER NUMBER
3641	

DATE MAILED: 07/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/683,376	Applicant(s) Droege
	Examiner Jack Keith	Art Unit 3641

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *Jun 25, 2003* .

2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-19 and 26-30* is/are pending in the application.

4a) Of the above, claim(s) *7-19* is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-6 and 26-30* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some* c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
4) ☐ Interview Summary (PTO-413) Paper No(s). _____
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Request for Continued Examination

1. The request filed on 6/25/2003 for a Request for Continued Examination (RCE) under 37 CFR 1.114 based on parent Application No. 09/683,376 is acceptable and a RCE has been established. An action on the RCE follows.

Response to Arguments

2. Applicant's arguments filed 6/25/2003 have been fully considered.

As previously set forth in Paper no. 12 the mode of operation (i.e., first mode and second mode) is not defined by the claim language. The recited limitations (i.e., first mode and second mode) do not define actual plant operating conditions (i.e., start up, normal ops, shut down, casualty ops, maintenance ops, etc.). Thus, while the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See In re Van Geuns, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Accordingly, interpretation of the claims to their reasonably broadest interpretation is proper.

Applicant argues that Hench ('716) does not disclose a system operating in a first mode wherein the first mode comprising a predetermined configuration of valves, dampers, motors and pumps, and switching the system to a second mode without going to standby mode, the second

mode comprising a predetermined configuration of valves, dampers, motors and pumps different from the first mode.

The examiner disagrees. As previously set forth Hench discloses a safety monitoring system *capable* of meeting applicant's claimed inventive concept. Note that applicant's claims are broad. As such the interpretation of the claims set forth below reads on applicant's claims.

Hench discloses a method of operating a nuclear reactor power plant system in a first mode and switching from a first mode to a second mode without going to standby. These modes 1-6 are set forth on the display panel of figure 3, the modes comprising residual heat removal, reactor core isolation cooling, etc. Note that each of these system (residual heat removal, reactor core isolation cooling) comprise valves, dampers, motors and pumps having different configurations. During operation the monitoring of a first mode parameter (e.g., reactor core isolation cooling) is interrupted when a monitored second mode parameter (e.g., residual heat removal) interpreted through logic notifies the operator that an abnormal condition exists. The operator is then prompted to manually press a pushscreen button to change the method of operation of system from monitoring of the first mode to monitoring of the second mode. No standby mode exists, other than the time required for the operator to switch the modes.

The 102 rejection of Paper no. 10 has been incorporated below, but modified to include newly added claims 26-30.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1, 2, 5 and 29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. Claim 2 - it appears that to be consistent with the intent of applicant's invention the second mode must also be associated with a nuclear power plant system also. Thus the switching of the modes in claim 1 from a first mode to a second mode is indefinite based upon the limitation of claim 2.

b. Claims 5 and 29 there is no indication of what constitutes a plant permissive. That is they (plant permissives) are undefined in the claim language and the specification. Accordingly, the meets and bounds of the claim are vague and indefinite.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless -
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-5 and 26-29 are rejected under 35 U.S.C. 102(b) as being anticipated by the admitted prior art (see specification page 2, paragraphs 5+).

Applicant sets forth that it is known in the art to monitor emergency cooling systems (i.e., core cooling/flooder systems). Note these systems comprise various valves, pumps, etc. Applicant further admits that in the event of an unsafe condition the plant automatically effects a remedial action. That is the system switches from a normal mode of operation (first mode) to an emergency mode of operation (second mode) without going to standby.

7. Claims 1-6 and 26-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Hench et al (4,421,716).

As set forth above Hench discloses a safety monitoring system capable of meeting applicant's claimed inventive concept.

Referring to figure 3 Hench discloses a method of operating a nuclear reactor power plant system in a first mode and switching from a first mode to a second mode without going to standby. These modes 1-6 are set forth on the display panel of figure 3, the modes comprising residual heat removal, reactor core isolation cooling, etc. Note that each of these system (residual heat removal, reactor core isolation cooling) comprise valves, dampers, motors and pumps having different configurations. During operation the monitoring of a first mode parameter (e.g., reactor core isolation cooling) is interrupted when a monitored second mode parameter (e.g., residual heat removal) interpreted through logic notifies the operator that an abnormal condition exists. The operator is then prompted to manually press a pushscreen button

to change the method of operation of system from monitoring of the first mode to monitoring of the second mode. No standby mode exists, other than the time required for the operator to switch the modes.

The system of Hench further sets forth a fail safe logic wherein the mode of operation is automatically changed on the display screen without going to a standby mode in the event of a selected plant variable out of limit.

While patent drawings are not drawn to scale, relationships clearly shown in the drawings of a reference patent cannot be disregarded in determining the patentability of claims. See In re Mraz, 59 CCPA 866, 455 F.2d 1069, 173 USPQ 25 (1972).

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jack Keith whose telephone number is (703) 306-5752. The examiner can normally be reached on Monday through Friday from 7:00 to 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Carone, can be reached on (703) 306-4198. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-7687.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

Jack Keith
Examiner,
Art Unit 3641

jwk

July 15, 2003